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December 4, 1998

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

VIA HAND DELIVERY

Magalie Roman Salas
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

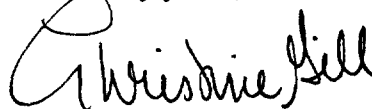
Re: Petition for Waiver of Rule 20.18(c) Pursuant to Bureau Order in CC
Docket No. 94-102

Dear Ms. Salas:

Transmitted herewith, on behalf of the Southern Company, is an original and four (4) copies of a Petition for Waiver of the requirements of Section 20.18(c), with respect to the transmission of 911 calls from TTY devices. This petition is submitted in response to an Order by the Chief, Wireless Telecommunications Bureau, released November 13, 1998 in CC Docket No. 94-102, specifying that such Petitions must be filed by December 4, 1998.

Please date-stamp the attached copy of the Petition to serve as proof of filing. Should any questions arise concerning this Petition, the Commission is kindly requested to contact the undersigned telecommunications counsel for the Southern Company.

Cordially yours,



Christine M. Gill

Enclosure

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BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

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DEC - 4 1998

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of

Revision of the Commission's Rules
To Ensure Compatibility With
Enhanced 911 Emergency Calling Systems

CC Docket No. 94-102
RM-8143

To: The Acting Chief, Wireless Telecommunications Bureau

**SOUTHERN COMPANY'S PETITION FOR
WAIVER OF COMMISSION RULE 20.18(c)**

Southern Company ("Southern"), by and through its attorneys, hereby respectfully requests that the Federal Communications Commission waive the requirements of Section 20.18(c) of the Commission's Rules, 47 C.F.R. §20.18(c), with respect to the transmission of 911 calls made from text telephone (TTY) devices. As the Commission is aware, equipment manufacturers of digital wireless equipment have not yet resolved many of the technical issues involved in fully complying with the FCC's rules concerning the transmission of E911 calls from TTY devices.

Because Southern employs Motorola's iDEN technology, which utilizes TDMA digital technology, it simply is not possible for Southern to comply with Section 20.18(c) by January 1, 1999. More specifically, the Southern system has an operating architecture that makes compliance with FCC Rule 20.18(c) impossible with respect to TTY devices operating Baudot 45.45 technology at this time. On the other hand, the Motorola iDEN technology employed by

the Southern system does permit the transmission of TTY messaging employing the Bell 103 standard. Southern is pleased to report that technology that permits processing of Bell 103 standard TTY messaging has been installed and is currently being tested. Consistent with the capabilities of the iDEN technology, Southern is committed to, and will implement, as detailed below, digital wireless E-911 TTY operations utilizing the Bell 103 standard during 1999.

Accordingly, Southern asks the Commission to waive Commission Rule 20.18(c) on a limited basis, as described in detail below, to allow Southern additional time to fully comply with the E-911 TTY requirements to the extent technically feasible.

INTRODUCTION AND BACKGROUND

Southern, an electric public utility holding company, operates through its subsidiary, Southern Communications Services, Inc., a unique, digital, wide-area Commercial Mobile Radio Service ("CMRS") system in the Southeastern U.S.^{1/} Southern's CMRS system is a centrally switched, state-of-the-art digital 800 MHz Specialized Mobile Radio (SMR) system, with an authorized service area of more than 120,000 square miles. The system provides internal communications for Southern's five electric utility operating companies, as well as commercial mobile radio service for thousands of external customers. Many of these external customers are state and local government agencies that employ Southern's digital system to discharge their

^{1/} In late December of 1994, the Securities and Exchange Commission approved the formation of Southern Communications Services, Inc., a wholly-owned subsidiary of Southern, organized to provide land mobile radio service both to the affiliated operating companies and to the public on a commercial basis. See The Southern Company, Memorandum Opinion and Order, SEC Release No. 35-26211 (December 30, 1994).

critical public safety responsibilities. Southern also serves a wide variety of business and industrial entities who have a requirement for mobile dispatch, mobile data, short message service (SMS) capabilities, paging and interconnected mobile telephone service offered on the Southern system.

Southern wishes to emphasize that its iDEN system is predominantly used by customers with large fleets of vehicles such as those operated by state and local government agencies. For example, the Georgia State Patrol is one such large customer on the Southern system; others include delivery services contractors, and energy utility work crews. As required by Section 20.18, Southern has notified each of its subscribers that it is currently unable to support pass-through of a E-911 TTY call on the iDEN system.

REQUEST FOR WAIVER

Both the Commission and the courts have long recognized that it is appropriate to waive a rule where doing so (1) is in the public interest; and (2) will not eviscerate the rule. WAIT Radio v. FCC, 418 F.2d 1153, 1158-59 (D.C. Cir. 1969). Because the Southern system has an operating architecture that makes compliance at this time with FCC Rule 20.18(c) technologically impossible with respect to TTY devices operating analog technology, Southern believes that its waiver request complies with the criteria set forth in WAIT.

In addition, pursuant to the Wireless Telecommunications Bureau's November 13, 1998 Order,² Southern states with particularity its effort to comply with the rule as follows:

(A) Steps the Carrier Is Taking or Intends to Take to Provide Users of TTY Devices With the Capability to Operate Such Devices in Conjunction With Digital Wireless Phones.

Motorola's iDEN Inter-Working Function (IWF), used in conjunction with the switch to accept -- and process -- data communications, has been installed and is currently being tested in the Southern LINC network. By facilitating non-voice transmissions through the switch, the IWF routes data through the switch and onto the public switched telephone network (PSTN). The IWF will be used in conjunction with a terminal (personal computer) and a new handset capable of supporting data. In this manner, TTY wireless E-911 communications to the Public Safety Answering Point (PSAP) can be accommodated. However, the iDEN IWF only supports the Bell 103 standard for TTYs, and does not support Baudot 45.45 TTY equipment. Currently, it is Southern's understanding that there are technical solutions being pursued by the TTY/TDD Forum that would enable digital wireless carriers to accommodate Baudot 45.45.

(B) When the Carrier Intends to Make This Capability Available to TTY Users. This Information Should Include Well-Documented Timetables and Milestones From the Carrier Regarding the Implementation of This Capability.

Southern wishes to emphasize that although the Commission imposes digital E-911 TTY pass-through requirements on CMRS carriers, in reality the FCC-licensed carrier is totally dependent on its equipment vendor to achieve compliance with the TTY mandate. Accordingly,

² Wireless Telecommunications Bureau Order, CC Docket No. 94-102, DA 98-2323, at para. 12 (released November 13, 1998) ("the Waiver Order").

the timetables and milestones for TTY compliance are dependent on the vendor of iDEN hardware – Motorola. Southern is closely coordinating with Motorola to implement the TTY solution in a timely fashion. The installation of the IWF has begun and versions of the handset that can support TTY through the IWF are available. The IWF-TTY handset implementation will be underway during the first quarter of 1999; full completion will be ongoing during the second and third quarters of 1999.

(C) What Reasonable Steps the Carrier Will Take to Address the Consumer Concerns Referenced in the September 30 Order.

(1) Character error rate less than 1% (approximating AMPS) for stationary calls. At this time, Southern does not have any information from the vendor of the iDEN equipment concerning the error rate of the iDEN TTY solution.

(2) Ability to visually monitor all aspects of call progress. Many aspects of call progress can be monitored directly on the iDEN unit. For example, when the call is initiated, the “Phone in Use” is displayed, and the display changes to indicate that the call has been answered. When the call is terminated, the display returns to “Phone Ready”. Visual monitoring capabilities of call progress can be more fully evaluated once the commercially-available terminal/handset interface has been released to Southern.

(3) Visual indication of call disconnection. As indicated, in point #2 above, the iDEN handset provides visual indication of call disconnection.

(4) Volume control. The iDEN unit has a volume control for the Ring and for Conversation volume.

(5) *Tactile (vibrating) Ring Indication.* The iDEN unit provides the user the option of having the unit vibrate to indicate an incoming call.

(6) *Ability to transmit TTY tones independent of the condition of the receiving modem.* This is to permit signaling by pressing a key, so that, in the E-911 context, the PSAP knows the incoming call is from a TTY. As noted above, the Inter-Working Function does not support Baudot 45.45.

(7) *The landline party's TTY must not require retrofitting in order to achieve the desired error rate.* There are no plans to retrofit the landline party's TTY to achieve a desired error rate.

(8) *Wireless party's TTY may require retrofitting or a new model TTY to be developed, or the use of a portable data terminal such as a personal digital assistant.* Southern notes that use of a digital data-based solution offers the best method for achieving digital E-911 TTY compatibility and consumer goals. According to Southern's vendor, the use of a portable PC running communication software can achieve this goal. For the iDEN equipment, a new handset, to be used with such a data terminal, would be the iDEN solution for these issues.

(9) *VCO (voice carryover) and HCO (hearing carryover) should be supported where possible.* According to Southern's vendor, these features are not supported.

(10) *Reduction of Baudot throughput on a Baudot system is highly undesirable and should not be relied upon to achieve compliance (in the same manner that the landline party's TTY should not require retrofitting (see #7)* As noted above, Baudot 45.45 is not supported.

(11) *Call information such as ANI and ALI, when available for wireless voice, should be available for the TTY call.* TTY employed with the operating system used for iDEN (GSM08)

allows both a 10 digit call back number (ANI) and 10-digit cell site location identification (pANI) to be transmitted to the PSAP.

(12) TTY solution should be compatible with the embedded base of TTYs sold over the past 10 years and should not be limited to the equipment used in PSAPs. As noted above, the iDEN IWF solution should be able to communicate with any TTY that uses the Bell 103 standard.

(13) Drive conditions must be supported, using AMPS as a benchmark. With reference to Point #1 above, Southern does not have any information at this time from the vendor of the iDEN equipment concerning the error rate of the iDEN TTY solution.

CONCLUSION

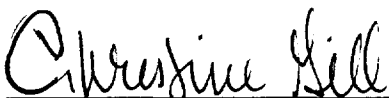
Southern emphasizes that it shares the Bureau's commitment to implementation of the digital E-911 TTY pass-through requirement. Indeed, Southern has joined the TTY Forum, actively participated in November's Forum 9, and looks forward to its continued participation in the important work of the Forum. Nevertheless, Southern urges the Commission to recognize: (1) that vendors, not carriers, are the determining factor in TTY compliance; and (2) that Southern's digital system is used by industrial, business and governmental entities rather than individuals, and there has been no immediate demand for TTY capabilities on the Southern system.

Accordingly, Southern respectfully urges the Bureau to grant this Petition to waive the provisions of Rule 20.18(c) as discussed herein. Should there be any questions regarding this

Petition, or if any additional information is required, the Bureau is requested to kindly contact the undersigned telecommunications counsel for Southern.

Respectfully submitted,

SOUTHERN COMPANY

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Its Attorneys

Dated: December 4, 1998